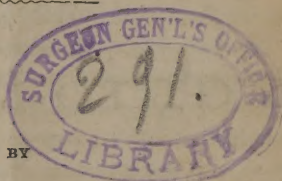


<sup>10</sup> Taylor (G. H.) & Taylor (C. F.)

PRINCIPLES AND PRACTICE

OF

HYGEIO-MEDICAL SCIENCE.

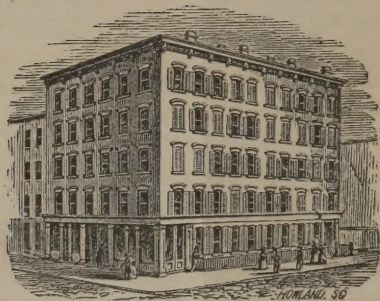


GEO. H. TAYLOR, M.D., AND CHAS. F. TAYLOR, M.D.

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NEW YORK:

1857.



DR. TAYLOR'S  
HYGEO-MEDICAL  
INSTITUTION,  
NO. 650 SIXTH AVENUE,  
New York.

## HYGEO-MEDICAL SCIENCE.

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It is pretty generally known by those having an interest in medical reform, that we pursue a practice that differs considerably from the usual plan of applying what is denominated the Water-Cure System—but it is not, perhaps, so widely known, that we have introduced several measures, auxiliary to those usually adopted. The general ideas that underlie this system are, by us, carried out to a more complete realization, and constitute, upon the whole, a plan of medical treatment widely different from any heretofore or elsewhere practiced. These considerations demand that we state in a brief manner, but somewhat explicitly, the form and nature of these adjuncts, as well as the principles that we conceive to govern a true practice of the healing art.

The public is in possession of many common-sense ideas in matters pertaining to the subject of health; all branches of natural science are abundant in suggestions of great practical import, and there is an undoubted preparation in the public mind to receive a systematic arrangement of medical truths.

These truths are readily harmonized into a beautiful and comprehensive system, with principles substantial and incontrovertible. To be aware of this is what the people greatly need, in order that the sick, in adopting any new measures, may feel shielded from the suspicion that they have met a new phase of empiricism.

Another use of a systematized practice is to command the attention and respect of the various shades of the medical profession, that their deeply-rooted prejudices may be overcome by the convictions of judgment.

Thus it will be seen that by our plan, hygienic resources are not only



rendered more available, but the *idea* that underlies all correct practice of the medical art being extended into all the physiological relations, where nothing has been previously attempted, a beautiful and unitary system is rendered complete.

Neither jealous members of the profession, nor the public, for whose benefit we labor, will gainsay the fact that several valuable auxiliaries in the medical practice, in accordance with physiological and natural science, have been introduced by us; we claim attention to these ideas and means, for the purpose of establishing their intrinsic value, rather than as making pretensions to personal or professional merit for ourselves, or the hope of gaining an ephemeral popularity.

We were the first to introduce to this country "*Kinesipathy*," or the "*Movement Cure*," invented by Ling, of Sweden, and for a long time used not only in hospitals, but in the Public Training Schools of several of the continental countries. We are the only ones that *can*, or that probably will, for some time to come, practice it in this country. Already we can furnish certificates from the most intelligent and respectable sources, attesting the happy results of this practice in many cases, in which any other mode of treatment must, of necessity, have utterly failed to reach.

*The Compressed Air Bath* is an entire novelty in this country, and, with a single exception, ours is the only Water-Cure in the world where it is employed. Strange, that when *weight* has ever been popularly known to affect the system as profoundly as temperature, as indicated by the expressions of the invalid during meteorological changes, that medical practice should not, ere this, have taken advantage of the obvious import of this fact.

*Dry Cupping* has been often employed by all classes of medical practitioners, with effects nearly too insignificant to claim attention. By the "*Junod's Boot*," which we were the first in America to employ, the advantages of this physical recourse may be secured on a most extensive scale, and in judiciously selected cases has supplied in our hands a very valuable auxiliary to other means.

The rationale of the *Electro-Chemical Treatment* was first given at this Institution, and it is believed that the public now accord us this merit. In certain cases this recourse is highly useful.

With juster ideas of medical principles, our practice, so far as it consists of water applications, is correspondingly modified. Thus the stigma of routine and one-idealism to which Water-Cure has, with some justice, been entitled, is removed. We do not employ baths without a *purpose*; we do not produce crises and disease by their indiscreet use, but employ the processes only with reference to certain and undoubted *ends*.

### PRINCIPLES IN OUR TREATMENT.

The treatment of the sick at this Institution consists of such measures *only* as depend on obvious principles of Natural and Physiological Science. We would like to have our patients and friends ponder the following propositions, embracing some of the principles that govern our practice:

1. A first object is to secure the supremacy of *correct ideas*. Health, no less than the intellect, is susceptible of culture, and ill health is a result, to a great extent, of either *ignorance*, or mistaken notions in regard to it. The kind of health has a direct relation to the principles that control it. We regard *ideas* as preferable to *doses*.

2. It is important to understand that sickness is not an absence of vitality, but an interruption of its operations, and that life, in all cases, is the product of invariably the *same fundamental causes*. If these causes are absolute in *maintaining* the health, they are *no less* so in effecting its restoration. The requirements of the sick are not new materials (as drugs), but a better adjustment of the established and indispensable conditions. Hence the varied use of food, air, temperature, exercise, and mental states or volitions, are sufficient for vital purposes, and are the perfectly natural incentives to vital function, and consequently must embody the means of securing their balance.

3. Though the powers that constitute man are varied and complex in their minute descriptions, yet for practical purposes our understanding of them may be simplified by considering them under *three* general divisions:

1. *Organic life*—those powers that are connected with the growth and decay of the minute parts.

2. *Sensational life*—the power of perception through the senses, and embracing also all impressions capable of producing actions.

3. *The Intellectual life*, or the manifestations of the reasoning powers.

The *Hygeio-Medical Art* consists of such means as serve to promote these several ends, each in accordance with its natural wants.

I. ORGANIC LIFE is promoted by attention to the following particulars, viz.:

(1.) By furnishing the growing parts with just the materials their growth requires, and embraced in the constituents of proper food and air.

(2.) By being equally scrupulous in rejecting all matters, of whatever name or kind, that do not properly belong to *food*. [Drugs antagonize the organic force, and subtract from it, by the amount of their chemical value.]

(3.) By avoiding a disproportion in the relation of the different constituents of food.

(4.) By excluding from the body all effete matters, chiefly by means of *respiration*.

(5.) By allowing the body to part with its heat, either constantly (as in the open air), or by special exposures (as bathing), or by exercise, so as to induce respiration to an extent sufficient to free the system from impediments to its action. [*Respiration* is always in the ratio of the abstraction of heat, hence bathing is an efficient means of increasing it.]

(6.) By repressing excited action (irritability), by (a) supplying variations of temperature, with proper restrictions; (b) by special movements (*Kinesipathy*); (c) by the use of the *bath of compressed air*.

II. SENSATIONAL LIFE.—The functions of the nervous system require special attention in the invalid.

The natural and most wholesome incentive to nervous power is the impression that is constantly received by the whole sensory surface, viz., a temperature *below* its standard. The amount of heat the body loses meets with frequent variations from natural causes, and can easily be varied at will through the instrumentality of *bathing*. *Temperature* has a relation to nearly every function of the body, hence they are all subjective to its influence through the nervous system.

We avoid producing that unnatural sensibility of the nervous system



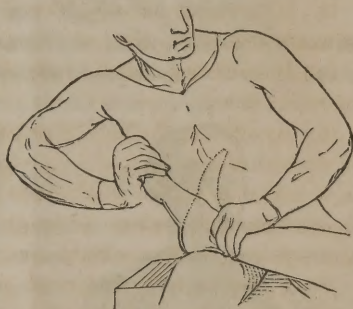
so often and so easily procured by injudicious use of temperature through water-bathing. Such cases we treat successfully by operating through *other* functions than the calorific.

III. INTELLECTUAL LIFE.—The mind must be employed harmoniously with the organic capabilities. In a great majority of cases these capabilities can not be well increased without the action of the intellect be temporarily repressed, or changed to an entirely different set of objects. Often the system has become fairly *starved*, because the organic power has been appropriated by the nervous system. By promoting the functions of the general system, an *equipoise* is attained, and health is restored.

### KINESIPATHY, OR MOVEMENT CURE.

As the object of bathing is to promote the *calorific capabilities* of the system, with all the related functions, so the object of the “movements” is to promote its *dynamic capabilities*. Since the principal thing sought of the system is the available force it can produce, the means of procuring it are of first importance. The “movements” consist in *acting upon*, and causing to *act*, any and every muscle and fiber of the body, in conformity with its Anatomy and Physiology. Nutrition and power are thus with certainty increased. The blood is made to circulate into poorly nourished parts, oppressed organs are relieved, while the *pulse is decreased*, and nervous sensibility lessened.

It is particularly applicable to



relieve (1st) those affections of the nervous system occurring in the course of disease, or produced by injudicious medical treatment.

(2d.) Chronic weaknesses of the digestive organs, affections of the liver, spleen, throat, and all general or special debility.

(3d.) The movement cure is the *only* proper means of overcoming those diseases and deformities of the spinal column having their origin in defective nutrition. It is readily seen that since the spine is maintained in its erect position, as in fig. 1, by its muscles, like the

stays of the mast of a vessel, any defect in this support will permit the column to curve in consequence of the superincumbent weight (as in



Fig. 1.



Fig. 2.



figs. 2 and 3); and the points of elastic cartilage at the inside of the curve will become ulcerated or absorbed, and all the painful results of deformity entailed. This can be corrected, and has been in numerous



instances in our care, by developing those muscles whose contraction serves to relieve the pressure and restore the spine.

The effect produced by several weeks' or months' treatment in cases of this kind is truly wonderful, and induces in us the belief that when, in time, the profession shall be made acquainted with this application of physiology, orthopædic surgery will be, to a good extent, superseded.

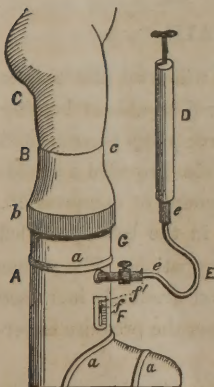
*The Movement Cure* is the most efficient means of curing scrofula and its various consequences. The circulation in the lymphatics is promoted by mechanical means, and muscular contractions renew and vivify the function of the lymphatic glands, and their enlargements are reduced. The Movement Cure opens a new era in the treatment of this class of diseases.

Fig. 3.



### JUNOD'S BOOT.

The operation of this instrument is simply to remove the atmosphere, to a small extent, from a lower extremity, which causes the blood to flow from other portions of the body into that part, so as to greatly distend its vessels.

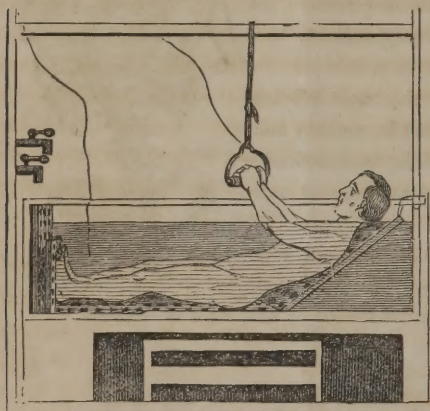


The purposes for which it is applied are twofold: to restore circulation and warmth in the feet, and to remove congestions from superior organs that may be suffering from acute disease, as cerebral congestion, inflammation of the throat, etc. From four to eight pounds of blood may thus be removed from the general circulation, without removing it from the body, the same being detained in the extremities, and thus prevented from con-

tributing to the diseased action, but gradually returning into the general circulation again.

### THE ELECTRO-CHEMICAL BATH

Has been much in vogue for two years past, and though its effects may have been unscrupulously exaggerated by interested, ignorant parties,



is yet not without a decided utility. We are in the habit of applying it in some cases for which it is adapted. The operation is simply that of electrolyzing the body in contact with some easily decomposable substance. In this way, without directly affecting the vital action of parts, the non-vital constituents of the body are changed

in their quality, and an impediment to the normal function is removed.

### THE COMPRESSED AIR BATH.

A small metallic room, with heavy plate glass windows, and a door for ingress and egress, is constructed air-tight, and capable of bearing a considerable pressure. A double-acting air force-pump is connected with the bath-room by a strong hose. There is also provided a graduated valve, and a barometer to regulate the amount of compression. The invalid, in his ordinary clothing, is seated in the bath, provided with a book, or any other agreeable means of occupation. The pumps are set in very slow action, and the compression gradually increased for half an hour, and is kept up for an hour, when the pressure is permitted gradually to resume the natural state.

The effect is agreeable, and particularly salutary in diseases of the

throat, lungs, and in congestions generally. In some cases of pulmonary disease the pulse is depressed thirty beats or more per minute. The reason for this seems to be in the fact, that the increased amount of oxygen of the condensed air enables the blood to receive its proper amount of this vivifying principle, notwithstanding the diminished capacity of the diseased lungs.

The effect of the Compressed Air Bath is very marked in dissipating internal congestions, particularly of the chest, throat, and air passages. It relieves that sense of oppression, difficulty of breathing, and tightness across the chest, so common in these cases, and substitutes ease, calmness, and such a sense of comfort and relief that the patient, before almost gasping for breath, often falls into a quiet sleep—and these sensations often remain for hours after leaving the bath of compressed air. This is a method of “inhalation” that will commend itself to every rational mind.

We have thus briefly indicated a *few* of the most important principles that guide us in our practice. The full elucidation of these principles would require volumes, embracing the whole of medical, and much of physical science. With ample means at command to fulfill every indication of disease, we make use of such hygeo-medical measures *only* as will best promote physiological harmony and health in each case. We are not routinists; we have no pet prescriptions; we do not deluge our patients with bathing simply because we do not know what else to do, or overwhelm them with exercise because we have a general notion that exercise is good; but every means is nicely adapted to the special requirements of each case, in such a manner as to meet special indications, and to secure a definite object. A vague and general idea that health is somehow to be found is not enough; the physician's duty is to lead the patient step by step along the road, and he must have well-established principles as landmarks to point the way. Nothing but a more or less complete system of hygeo-medical practice as here briefly indicated can save the practitioner from blind prescriptions and constant errors.

The aim of our practice will be easily apprehended. It considers the different physiological capabilities of the system as all having their own natural incentives, to which their healthy actions are necessarily

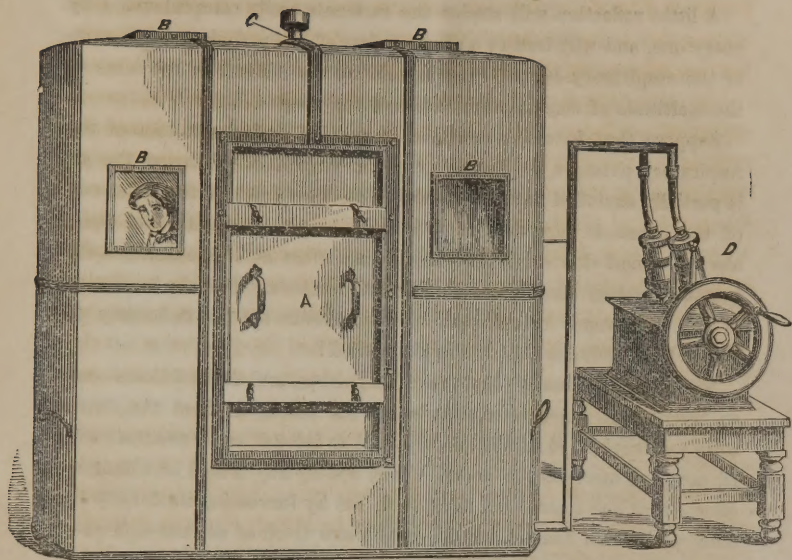


related. It maintains that it is through these, and these *only*, that the best medical effects are secured. Since the development of functional power is dependent on causes, absolute and prescribed in Nature, and since health is the harmony of these, it is futile to attempt to secure it through others, such as the local or general effect of drugs.

But these natural circumstances must be so nicely adjusted as to secure vital harmony. For instance, muscular nutrition and power are secured by muscular exertion, but to exercise the muscles beyond their capabilities, or more than is compatible with their nutritive supply, or irrespective of their harmonious action, becomes *harmful*. *Electro-Chemistry* and the *Compressed Air-Bath* are resources of Hygiene, specially applicable in certain cases, but are quite inoperative in others. The futility is apparent of attempting to substitute the effect of *any* medical agency, even those herein indicated, in the place of a proper regard for *diet*, and it is equally unphilosophical to substitute any *one* for *another* of these.

Thus the liberal employment of temperature (through water) though efficient in developing the heat-making capabilities of the system, is *not* always the best resource for increasing its muscular power. Nor can it be the best means of *repressing* inordinate nervous activity, since it has the power of *producing* this effect.

Let us regard the system, when in the full use of its powers, as a harmonious whole, the interplay of whose functions beautifully contributes to its unitary perfection. But these powers are ever liable, notwithstanding the checks and balances provided by Nature in the arrangement of them, to be subjected to unnatural influences to such an extent as to cause them to act unequally, to become weakened, and thus to suffer a loss of this harmony. The physician understanding his trust, will study the various checks and balances of the system, and will supply to each part that which has been lost, whether the fault comes from ignorance, or perversity, or the operation of unavoidable natural causes.



## DR. TAYLOR'S COMPRESSED AIR-BATH,

650 SIXTH AVENUE, NEW YORK

THE Compressed Air-Bath has been successfully employed in France for seventeen or eighteen years, and it is from records of experience obtained thence that our first impressions regarding its employment were received. It has also been introduced into England. Were it not that an expensive apparatus is necessary, involving much time and expense in its successful management, no doubt it would have long ago taken its proper place, and superseded most of the other means employed for the diseases for which it is peculiarly applicable. We have successfully overcome all the difficulties of delay and extra expense incident

to a new enterprise, and the whole operation and its effects may be witnessed daily at our Institution by all who choose to inquire.

A little reflection will render the rationale easily comprehended by every one, and will lead to a simpler view of the pathology of diseases of the respiratory organs, than is held by the schools of medicine or the multitude of consumption curers of the present day.

Suppose that, in consequence of congestion or inflammation of the respiratory passages, or disease of the substance of the lungs, the air is partially excluded so that a portion, say one third, of the efficiency of the organ is suspended. A hurried respiration and rapid pulse always attend this condition; this is an effort at *compensation*—the best the system can do under the circumstances. Can the inhalation of any drug vapor mixed with air compensate for the deficiency of AIR? Is it medicine that is now demanded?

In pulmonic disease the system languishes, and death follows—not so much from a non-arterialization of the blood, as from *the forced state under which the system is compelled to labor in order to attain air*. If, now, we increase the access of air, not by any forced or voluntary efforts that the system can illy afford, but by increasing its density by compression—in the supposed case, by one third of an atmosphere—there will be an equilibrium between the vital wants and their supply; the duty of health will be performed, and the most perfect condition secured for the restoration of diseased parts. The objects of breathing are attained by the Compressed Air-Bath, without stimulating and wasting the powers of life, but by husbanding them; the excited heart's action decreases, and the system is refreshed.

The advantages of the Compressed Air-Bath are most undoubted, for either those who have an established disease of the pulmonary organs, or who have symptoms that give rise to a suspicion of that form of disease. It is the best means hitherto discovered for palliating the symptoms of every stage of that distressing malady, because the system is thus supplied both with the *material* and the *rest and refreshment* that it most needs. But its good effects do not cease here. It supplies the most effectual means of *unloading* the engorged and inflamed lining membranes of the bronchial tubes, as well as the substance of the lungs. This seems to be effected by supplying the local



demand for arterialization of the blood, whereby those constituents that promote obstruction are reduced to healthy products, an act in which the whole capillary system participates. Thus tubercular deposits would be obviated. And in actual tuberculization no means can be more powerful for restoration than this use of *air*, which so removes all morbid actions and materials from the system, and which at the same time is precisely the element that nature provides for the *maintenance* of health.

In acute disease of nearly every form, the amount of air employed by the system is very much enhanced, as indicated by the rapid pulse and respiration. This seems to be the method nature employs to rid the system of its offending matters. In pulmonary disease the quickened pulse and respiration seems to be an *ineffectual* endeavor to accomplish the same purpose, but this is prevented by the inadequate capacity of the respiratory organs and of the vital power. This capacity, where there is any tolerable foundation, rises with the supply of air.

The preceding cut represents the apparatus we employ for the application of the Compressed Air-Bath. The little room, *A*, *B*, is made of tinned iron, manufactured for this special purpose, well riveted, and strongly bound in each direction with strong iron bands, the whole rendered completely air-tight by soldering. Several movable rods or stays, with hooks at the end, extend across the inside, and prevent the sides from being torn asunder by the inside pressure. *A* is a door well packed with soft rubber at the edges, so as to be completely air-tight. *B*, *B* are windows, and *C* is a valve that gives egress to the confined air, and by means of weights placed upon it, the pressure per square inch is measured, in the same manner as by the safety valves of steam boilers. *D* represents two force-pumps of brass, acting reciprocally by means of gearing within the iron box upon which they are placed, operated by a band upon a pulley, or by hand. The air-pumps, however, with the power operating them, are placed in another room, and a communication is had by means of a strong rubber hose, whereby all noise of machinery is effectually prevented.

One, two, or more patients having entered the bath, and the door being secured, the pumps are set in action, and the air forced into the room accumulates until it escapes by the valve, *C*; but the pressure is

gradually raised by adjusting weights upon the valve until, in the course of twenty or thirty minutes, it attains three or four pounds to the square inch. The pumps being kept in continued action, the pressure is suffered to remain at about this point for about an hour and a half, when the pressure is gradually removed.

*Effects of the Bath.*—Those immediately noticeable are pressure upon the ear-drum, immediately relieved by attempting to swallow; an elevation of temperature a few degrees; sometimes a slight sensation of chilliness is felt; and if the respiratory organs be diseased, a remarkable ease and freedom in respiration is experienced. When the voice is tried, its powers are so restored as to surprise the patient—an effect which continues after the bath is ended. And what more than any thing else is the key to its good effects, a *fall of the pulse* takes place, sometimes to the extent of 25 or 30 beats per minute. The healthy, when they try the experiment, on the contrary, sometimes experience an elevation of the pulse, but no diminution. The effect upon the pulse seems also to be permanent.

*The Compressed Air-Bath* will doubtless prove an available and efficient means of arterializing the blood of that class of invalids whose condition precludes exercise. Experience proves that congestion and arrested capillary action, though formidable, are overcome, when the quality of the blood is corrected by this auxiliary respiration, and there can be no doubt but that this recourse will be found serviceable in many diseases depending upon similar causes, besides those of the respiratory organs.